

## CLAIMS

What is claimed is:

1. An electric machine, comprising  
a shaft; and  
a rotor core mounted onto the shaft and formed of a plurality of stacked laminations, said rotor core having opposite end surfaces for attachment of a plate in such a manner as to allow an axial deflection of the laminations in the area of the plate.
2. The electric machine of claim 1, wherein the plate has an inner diameter which is greater than an inner diameter of the rotor core.
3. The electric machine of claim 1, wherein the plate has an inner diameter which is greater than an inner diameter of the rotor core by at least 2 mm.
4. The electric machine of claim 1, wherein the plate has at least three webs extending substantially radially inwardly to realize a radial disposition of the plate on the shaft.
5. The electric machine of claim 4, wherein the webs have a width in the range from 4 to 20 mm

6. The electric machine of claim 4, wherein at least one of the webs has means for providing flexibility in a radial direction.
7. The electric machine of claim 6, wherein the at least one web is formed with a slit in circumferential direction to provide the radial flexibility.
8. The electric machine of claim 6, wherein the at least one web is formed with a hole to provide the radial flexibility.
9. The electric machine of claim 6, wherein the at least one web is reduced in material by laser application to provide the radial flexibility.
10. The electric machine of claim 9, wherein the at least one web has a shaft-proximal end zone from which material is removed by laser application to provide the radial flexibility.
11. The electric machine of claim 4, wherein the webs define an inner diameter, said webs being plastically deformed to slightly enlarge the inner diameter of the webs.
12. The electric machine of claim 6, wherein at least one of the webs is provided with a fitted key for realizing an angular alignment of the plate in relation to the shaft.

13. The electric machine of claim 1, wherein the plate is formed with slots for accommodation of rotor bars, and recesses for operation of the electric machine or its manufacture.